

CLAIMS

What is claimed is:

- 5 1. A power pricing plan rack equipment control method comprising:
 establishing a power pricing plan for operating rack equipment; and
 controlling operation of said rack equipment in accordance with said power
pricing plan.
- 10 2. The method of claim 1, wherein controlling said operation includes said rack
equipment performance settings.
3. The method of claim 1, wherein controlling said operation includes changing
power consumption by said rack equipment in accordance with said power pricing
15 plan.
4. The method of claim 3, wherein said power plan indicates a reduction in a
voltage and a frequency of said rack equipment when a price for power increases.
- 20 5. The method of claim 3, wherein said power plan indicates an increase in a
voltage and a frequency of said rack equipment when a price for power decreases.
6. The method of claim 1, wherein said controlling said operation comprises
automatically adjusting said performance interactively.
- 25 7. The method of claim 1, further comprising:

receiving an indication of a power pricing change; and
analyzing correspondence of said power pricing change to performance control
instructions included in said power pricing plan.

5 8. A computer-useable storage medium comprising computer-readable program
code embodied therein for causing a computer system to implement a power pricing
performance instructions comprising:

 a power pricing detection module for detecting indications of power pricing
fluctuations covered by a power pricing plan;

10 a power pricing plan policy module for ascertaining power pricing plan
instructions associated with said power pricing fluctuations; and

 an instruction generation module for generating rack equipment performance
adjustment commands to implement said power pricing plan instructions.

15 9. The computer storage medium of claim 8, further comprising a telemetry
monitoring module for monitoring characteristics and activity of rack equipment
associated with said adjustments commands.

10 10. The computer storage medium of claim 8, further comprising a power pricing
event spawning module for generating power pricing events.

11. The computer storage medium of claim 8, wherein said instruction generation
module comprises functionality for generating a command to postpone processing.

12. The computer storage medium of claim 8, wherein said power pricing plan information is an agreement between a host and a client and is structured in manner to accommodate business activities of said client.

5 13. The computer storage medium of claim 9, wherein said telemetry monitoring module also confirms said performance adjustments commands are complied with.

14. A power pricing rack equipment control system comprising:
rack equipment for processing data;

10 a power pricing plan component for controlling said rack equipment based on a power pricing plan policy; and

a communications bus for coupling said equipment and said power pricing plan control component, wherein said communications bus is utilized for communicating information between said power pricing plan control component and said rack
15 equipment.

15. The power pricing rack equipment control system of claim 14, wherein said power pricing plan component is operable to modulate power consumed by said rack equipment in accordance with said power pricing plan.

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16. The power pricing rack equipment control system of claim 14, wherein said power pricing plan component is operable to switch on and off said rack equipment in accordance with said power pricing plan.

17. The power pricing rack equipment control system of claim 14, further comprising a master management control center for coordinating control of rack equipment among a plurality of racks.

5 18. The power pricing rack equipment control system of claim 14, wherein said power pricing plan policy is dynamically adjustable on the fly.

19. The power pricing rack equipment control system of claim 14, wherein said power pricing plan policy is structured in accordance with business needs of a client.

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20. The power pricing rack equipment control system of claim 14, further comprising:

a memory for storing equipment information and power pricing plan policy information; and

15 a cross indexing component for cross indexing said equipment information and said power pricing plan policy information.